

## Title (en)

Hydroxyl-functional disiloxanes and polysiloxane oligomers.

## Title (de)

Hydroxy-funktionelle Disiloxane und Polysiloxan-Oligomere.

## Title (fr)

Disiloxanes et oligomères polysiloxane hydroxy-fonctionnels.

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## Application

**EP 87305103 A 19870609**

## Priority

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## Abstract (en)

Hydroxyl-functional disiloxanes and hydroxyl-functional polysiloxane oligomers are provided which contain hydroxyl groups bound to the silicon via Si-C bonds. These compounds may be crosslinked to form polysiloxane networks having improved mechanical strength or reacted to form linear, siloxane containing block copolymers. The disiloxanes are the formula <CHEM> wherein R is alkyl of 1 to 4 carbon atoms, fluoroalkyl of 1 to 4 carbon atoms, or aryl of 6 to 10 carbon atoms; and X is -OR' or -NR<sub>2</sub>R<sub>3</sub> wherein R', R<sub>2</sub>, and R<sub>3</sub> are independently hydrogen, alkyl of 1 to 4 carbon atoms, aryl of 6 to 10 carbon atoms or fluoroalkyl of 1 to 4 carbon atoms of claim 1, and the disiloxanes IIA may be used to prepare polysiloxanes of the formula <CHEM> by treating the disiloxane IIA with a cyclic polysiloxane. n

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## IPC 8 full level

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- [X] EP 0205888 A1 19861230 - TITMUS EUROCON KONTAKTLINSEN [DE]
- [X] DE 3509810 C1 19860515 - GOLDSCHMIDT AG TH
- [X] EP 0017121 A1 19801015 - HENKEL KGAA [DE]
- [X] MAKROMOL. CHEM., vol. 188, 1987, pages 93 - 102; G. KOSSMEHL et al.: 'Surface wettability of silicone rubber films'
- [X] J. AM. CHEM. SOC., vol. 81, 5th June 1959, pages 2632 - 2635, Washington, D.C., US; E.P. PLUEDDEMANN et al.: 'Epoxyorganosiloxanes'
- [X] CHEMICAL ABSTRACTS, vol. 81, no. 25, 23rd December 1974, page 553, abstract no. 169587e, Columbus, Ohio, US; S.I. SADYKH-ZADE et al.: 'Catalytic addition of silicon dihydrides to allyl glycidyl ether', & ZH. OBSHCH. KHIM. 1974, 44(8), 1784-6

## Cited by

DE10139963A1; GB2233332A; US5059707A; GB2233332B; GB2232157A; GB2232157B; US5115069A; US8821906B2; US6730766B2

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